

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/821,987	04/12/2004	Bu Qin Ruan	T1000-0001-P001	1568
64884 7590 04/03/2007 BERGMAN & SONG, LLP P.O. BOX 400198			EXAMINER	
			LANGDON, EVAN H	
CAMBRIDGE, MA 02140			ART UNIT	PAPER NUMBER
	•		3654	
SHORTENED STATUTORY PE	RIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTH	18	04/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)					
	10/821,987	RUAN, BU QIN					
Office Action Summary	Examiner	Art Unit					
	Evan H. Langdon	3654					
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address					
Period for Reply	/ 10 OFT TO EVENE * MONTH!	O) OD THIRTY (00) DAYO					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirn rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. sely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 08 M	arch 2007.						
,							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.							
4a) Of the above claim(s) <u>24</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
S)⊠ Claim(s) <u>1-19,22 and 23</u> is/are rejected.							
•	· · · ·						
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
.9) The specification is objected to by the Examine							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Ex							
,							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
· · · · · · · · · · · · · · · · · · ·	<ul> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
_ , , , ,							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal F						
Paper No(s)/Mail Date 6) Other:							

#### **DETAILED ACTION**

### Election/Restrictions

Newly submitted claim 24 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: new claim 24 is directed to a method of forming a tensioning device and is independent from the apparatus claims of 1-23 drawn to a binding machine

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 24 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Rutzki (US 4,542,883).

Rutzki discloses a binding machine comprising:

a reel (Fig. 2), the reel being adapted to receive a band 2 thereon;

a handle 42, the handle being coupled to the reel the handle 42 being adapted to receive an applied torque and to transmit the applied torque to the reel whereby the reel rotates to receive the band (col. 8 ll. 40 to col. 9 ll. 7); and

a torque indicator 55, the torque indicator being adapted to indicate a specific magnitude of the applied torque by a deflection of a portion of the handle, the deflection increasing against a substantially continuous spring force 86 in relation to an increase in the magnitude (col. 9 lines 24-33).

In regards to claim 6, Rutzki discloses the torque indicator 55 comprises:

a handle extension 47a, 48a, the handle extension being pivotally coupled to the handle; and

a spring 86, the spring having a first end coupled to the handle and a second end coupled to the handle extension whereby a deflection of the spring indicates a magnitude of the applied torque.

In regards to claim 7, Rutzki discloses the handle comprises a first side member 47 and a second side member 48 and wherein the handle extension includes a third side member 47a and a fourth side member 48a, the first and third side members having respective first and second apertures therein, the first and second apertures being disposed about a first end of a pin roll 74, the second and fourth side members having respective third and fourth apertures therein, the third and fourth apertures being disposed about a second end of the pin roll such that the third and fourth side members are adapted to pivot with respect to the first and second side members about the pin roll (Fig. 5).

In regards to claim 9, Rutzki discloses a body member 5 having an aperture there through, the reel being supported within the aperture; a ratchet 38, 39, the ratchet being coupled to the reel; a pawl 23, the pawl being coupled to the body member, the pawl being adapted to control a motion of the ratchet.

In regards to claim 10, Rutzki discloses a further band, the further band 13 being coupled to the body member, whereby the body member may be disposed in tension between the band and the further band by application of the applied torque.

In regards to claim 11, Rutzki discloses the spring 86 deflect at an angle.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutzki in view of Hess et al. (US 6,769,155).

In regards to claims 12 and 22, Rutzki discloses binding machine comprising:

a body portion 5;

a ratchet device 23,38,39 coupled to the body portion;

a first handle portion including first 47 and second 48 side members, the first and second side members be disposed in substantially parallel spaced relation with respect to one another, the first handle portion being coupled to the ratchet device for rotational activation of the ratchet device;

a second handle portion including third 47a and fourth 48a side members, the third and fourth side members being disposed in substantially parallel spaced relation with respect to one another, the second handle portion being pivotally coupled to the first handle portion at respective mutually proximate ends thereof;

a spring member 55, 86, the spring member disposed between the first and second side members, the helical spring being adapted to provide a monotonically increasing force in opposition to a pivotal displacement of the first second handle portion with respect to the second handle portion.

Hess teaches a joint connection (Fig. 4) having a spring (5, 6) around the joint 4 and either end of the spring connected to cross bars 12.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the joint connection the handle of Rutzki to include a spring around the joint and either end of the spring connected to cross bars as suggested by Hess, to provide a more consistent resistance force.

In regards to claims 13 –15 and 23 Rutzki as modified by Hess teaches the helical spring on both sides of the reel body would in opposite directions (Fig. 3, Hess), where a first end and second ends of the helical springs extend in opposite directions fixing to the bodies about the pivot joint.

In regards to claims 16 and 17, Rutzki as modified by Hess teaches the helical spring is disposed coaxially about the shaft and exerts a substantially negligible torsional force on the shaft.

In regards to claims 18 and 19, Rutzki as modified by Hess teaches the helical spring's first end is connected to cross member 7 (Fig. 1B, Hess).

## Allowable Subject Matter

Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Arguments

Applicant's arguments filed 08 March 2007 have been fully considered but they are not persuasive. The Applicant's argument that the newly added limitation "against a substantially continuous spring force" overcomes the 102 rejection in view of Rutzki is not persuasive. Applicant argues that mechanism described on Rutzki teaches a handle coupled to a reel where the handle deflects once the turning force on the lever is higher than a given level, and the lever will fold when the force causes a coupling, comprising tooth means, to slip. However, the coupling comprising tooth means are held in place and resist the turning force applied by a substantially continuous spring force 86. Therefore, Rutzki anticipates the Applicant's broad limitation of a "substantially continuous spring force."

In response to the Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that the references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of the disclosure taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather then by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969). In this case, Hess is relied upon to teach a joint connection (Fig. 4) having a spring (5, 6) around the joint and either end of the spring connected to cross bars. The motivation of one have ordinary skill in the art would be to provide a more consistent resistance force.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H. Langdon whose telephone number is (571)272-6948. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ehl

Eman 81. Mule 3/30/07 Primary Examiner